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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
AVELLINO, JOSEPH E	
ART UNIT	**PAPER NUMBER**
2446	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/704,535	BONEFAS ET AL.	
	Examiner	Art Unit	
	Joseph E. Avellino	2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 February 2009 and 03 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24-33,47 and 56-68* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *24-33,47 and 56-68* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/3/09, 2/17/09, 3/24/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 24-33, 47, and 55-68 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 3, 2009 has been entered.

Information Disclosure Statement

3. The IDS's dated February 3, 2009, February 17, 2009, and March 24, 2009 have been considered. See enclosed PTO-1449s.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 24-29, 31, 47, 55-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda et al. (US 20020133573) (hereinafter Matsuda) in view of

Olkin (USPN 6,310,892) in view of Renouard et al. (previously cited by the office as pertinent prior art) (USPN 6,161,123) (hereinafter Renouard).

5. Referring to claim 24, Matsuda discloses a method for supporting a plurality of intelligent messaging servers in an intelligent messaging network (i.e. a network 201), comprising:

handling registration (automatic configuration, network addressing, service discovery) of NOA (networked office architecture) servers and clients with the intelligent messaging network, wherein registration comprises storing a server id (fully qualified domain name) and a server type (i.e. service definitions, as seen in ¶'s 86-95) for the first intelligent messaging server in a database storing server ids and server types for the plurality of intelligent messaging servers (e.g. abstract; p. 5, ¶ 47-49; p. 8-9, ¶ 83-114);

connecting NOA clients/servers to one another (e.g. abstract; p. 8, ¶ 83-95) (it is understood that if a NOA client can utilize the services of another NOA client, then it is inherent that they are connected to one another);

encapsulating communication between NOA clients (e.g. abstract)

wherein a transport protocol used with said intelligent messaging network provides for: message segmentation and reassembly, message retries, message duplication detection, and message ACK and NACK service without relying on either a client application and server application (p. 3, ¶ 34, Matsuda discloses using the invention in a TCP/IP network, which, as shown by accompanying RFC 793

"Transmission Control Protocol", discloses the network has the ability to provide ACK and NACK service on page 20; message retries on page 4: section "Reliability"; message duplication detection on page 4: section "Reliability"; Message segmentation is disclosed as shown by accompanying RFC 791 "Internet Protocol", pages 35-36 discuss fragmentation of a datagram).

Matsuda does not explicitly disclose enabling communication between intelligent messaging servers, however Matsuda does disclose that if the NOA server does receive a DHCP Offer from a recently sent DHCP Discover broadcast, and the NOA sever determines that the other device is another NOA server, they determine which of them has the higher priority to determine which is the master (p. 5, ¶ 48). One of ordinary skill in the art would understand that this would be the easiest way for the servers to determine which server has the highest priority, and therefore it would have been obvious to do so to provide a simple method of determining which computer has the highest priority in the network.

Matsuda does not specifically disclose the transport protocol is a connectionless transport protocol used to allow said plurality of servers to communicate with one another and to provide networking services comprising message segmentation and reassembly, message duplication detection. In analogous art, Olkin discloses another method to transport packets over a network which utilizes a reliable connectionless transport protocol comprising a transport layer corresponding substantially to a transport layer of an OSI model (i.e. transport layer 240 and packetization 250 reside above the physical network layer 260 and below applications 230 and therefore inherently

encompasses OSI transport layer) and provides network services including segmentation and reassembly (i.e. transport layer divides the data into predetermined length data packets…on the destination side extracts the data from the data packets to reconstruct the original data) (col. 1, line 59 to col. 2, line 22), and message duplication detection (i.e. prevent the receipt of duplicate segments) (col. 6, lines 11-26), and acknowledging said message duplication using a peer protocol layer (the limitation "to facilitate discard of duplicate message" is a statement of intended use which holds no patentable weight) (i.e. layer is able to realize that the message is a duplicate, and therefore is able to discard the packet) (col. 6, lines 11-26). It would have been obvious to one of ordinary skill in the art to combine the teaching of Olkin with Matsuda in order to reduce network overhead inherent with TCP connection setup (i.e. three-way handshake) and therefore reduce network congestion on the network.

Matsuda-Olkin do not explicitly disclose that the peer connectionless protocol layer is a *wireless* peer protocol layer. In analogous art, Renouard discloses another method of providing reliable communication over an unreliable UDP layer which utilizes a wireless link (thereby making it a wireless protocol layer) (Figs. 3-4; col. 6, line 61 to col. 7, line 26). It would have been obvious to one of ordinary skill in the art to combine the teaching of Matsuda-Olkin to be utilized in the wireless network of Renouard, since Olkin discloses that the network can be configured to operate as any type of network (col. 4, lines 25-30), such as the wireless network of Renouard.

6. Referring to claim 25, Matsuda discloses the first code segment (i.e. registration process) specifies a server class (i.e. a server priority) and a server type (p. 6-7, ¶ 56, 61) for the first intelligent messaging server.

7. Referring to claim 26, Matsuda discloses the first code segment (i.e. registration process) specifies an IP address (p. 7, ¶ 65-66).

8. Referring to claim 27, Matsuda discloses the third code segment (i.e. network communication technique) generates a standard packet for communications between the intelligent messaging servers (i.e. an HTTP packet since the NOA architecture is based on an HTTP network connected to the Internet 201) (p. 3, ¶ 37; p. 4, ¶ 40).

9. Referring to claim 28, it is well known in the art that HTTP packets which the NOA architecture of Matsuda utilizes include a packet length (i.e. “Content-Length: XXXX”).

10. Referring to claim 29, it is well known in the art that HTTP packets which the NOA architecture of Matsuda utilizes includes a server ID (i.e. an IP address of the server) so that it is known the source or destination of the packet).

11. Referring to claim 31, Matsuda discloses a code segment encrypting and decrypting messages (p. 10, ¶ 126-127), however does not specifically state generating

acknowledgement messages, processing the acknowledgement messages, and compressing and decompressing messages, however it is well known in the art that acknowledgement messages (known as ACK's) can be sent from destination to senders if a particular segment or message has not been received, and it is then inherent that both the destination computer and the sender computer can process the ACK message to determine what, if any, action must be done to rectify the situation (i.e. retransmit a segment, restart transmission, etc.). It is further common knowledge that code segments which compress and decompress messages is well known and expected in the art to save transmission processing and reduce overall bandwidth on the network communication link. Therefore it would have been obvious to one of ordinary skill in the art to provide for generating and processing ACK messages as well as compressing and decompressing messages to further reduce overall server processing and increase efficiency while reducing congestion over the network.

12. Referring to claim 50, Matsuda discloses searching the database based on server type to identify the second server, the second server being of a server type that the first server desires to connect with (p. 9, ¶ 97-105).

13. Referring to claim 51, Matsuda discloses facilitating a handshake procedure determining a validity of a connection between the first server and the second server (p. 9, ¶ 102-107).

14. Referring to claim 52, Matsuda discloses the server types are associated with functions performed by the plurality of servers (p. 8-9, ¶ 83-114).

15. Referring to claim 53, Matsuda discloses the server types comprise protocol gateway servers (i.e. fax servers), message router servers (i.e. doc_retrieval servers) and back-end servers (calendar_schedule and retrieval servers) (p. 8, ¶ 86-95).

16. Referring to claim 54, Matsuda discloses the server class is associated with a network access protocol for a network connecting a client to the first server (p. 6-7, ¶ 56, 61).

17. Referring to claim 55, Matsuda discloses the invention substantively as described in claim 1. Matsuda does not specifically disclose encapsulating a network access protocol used to transmit data from a client device to the first server such that the network access protocol is transparent to the second server receiving the data from the first server. However it is well known that wireless browser-enabled cellular phones use the WAP (wireless application protocol) in order to connect to the Internet, this WAP signal is sent to a gateway which encapsulates this request into a standard HTTP GET request, thereby allowing the ability to connect to the internet. By this rationale it would have been obvious to one of ordinary skill to incorporate encapsulating a network access protocol used to transmit data from a client device to the first server such that the network access protocol is transparent to the second server receiving the data from

the first server because it would allow cellular users the ability to utilize the system, thereby increasing customer base and providing more of a market share to the system.

18. Claims, 47, 56-68 are rejected for similar reasons as stated in the claims above.

Claims 30, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda-Olkin-Renouard as applied above in view of Bell et al. (USPN 6,044,081) (hereinafter Bell).

19. Referring to claim 30, Matsuda-Olkin-Renouard discloses the computer-readable data storage medium as stated in the claims above. Matsuda-Olkin-Renouard furthermore discloses resending messages not ACK'd (Olkin: col. 6, lines 50-60), detecting duplicate message segments, reassembly of message segments, and detecting duplicate messages (see rejections above). Matsuda-Olkin-Renouard does not specifically and explicitly disclose encapsulating a transport header, notifying a sender of a success or failure of a transmission, segmenting messages over a pre-determined length into message segments. Bell discloses:

encapsulating a transport header (MAC frame header) (col. 20, lines 24-33);

notifying a sender of a success or failure of a transmission (it would have been obvious to incorporate a failure notification mechanism to the sender when a frame check sequence error is detected to reduce bandwidth by halting transmission of

unnecessary message segments and to retransmit pertinent segments) (col. 21, lines 20-30);

segmenting messages over a pre-determined length into message segments (encapsulation) (e.g. abstract; col. 20, lines 23-65);

assembling messages segments into messages (de-encapsulation) (col. 21, lines 30-51);

pacing a transmission of messages larger than a pre-determined number of segments (i.e. buffering messages and transmitting them in a queue) (col. 20, lines 20-25);

It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Bell with Matsuda-Olkin-Renouard to provide an efficient bandwidth connection while providing a path from every node to every other node within a private network without requiring multiple physical connections for each node as supported by Bell (col. 8, lines 30-35).

20. Referring to claim 32, Matsuda-Olkin-Renouard discloses the computer-readable data storage medium as stated in the claims above. Matsuda-Olkin-Renouard does not disclose encapsulating a communication layer. Bell discloses encapsulating a communication layer (the Office takes the term communication layer to mean formatting a higher level message to be transmitted over a network) (col. 20, lines 23-65). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Bell with Matsuda-Olkin-Renouard to provide an efficient

bandwidth connection while providing a path from every node to every other node within a private network without requiring multiple physical connections for each node as supported by Bell (col. 8, lines 30-35).

21. Referring to claim 33, it is well known in the art that application specific messages can be processed by servers (i.e. serving a web page, a CGI script, SOAP execution module, etc.) to provide services required by the application to the client. Furthermore, it is well known in the art that specific servers may compress messages as a form of encryption in order to provide an enhanced level of security as well as reducing used bandwidth on a communication link. Matsuda discloses code providing special security services (i.e. passwords and database updating) (p. 10, ¶126-128).

Response to Amendment

22. Applicant's arguments dated February 3, 2009 have been considered but are moot in view of the new grounds of rejection presented above.

Conclusion

23. Reference U in the PTO-892 (TCP RFC) has been cited to include a publication date which was missing from the record. No copy of this reference is provided since the reference was cited in a previous Office Action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C. Pwu can be reached on (571)272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph E. Avellino/
Primary Examiner, Art Unit 2446